

## 11. TITLE

ROLLER FOR CONVEYING A WEB OR SHEET OF PAPER IN PAPER  
CONVERTING MACHINES AND CONVEYING METHOD THUS OBTAINED

### ABSTRACT

5        The roller (1) is used for conveying a web or sheet  
of paper (20) in paper converting machines, for example, a  
rewinding, a winding, an interfolding machine. It  
comprises a first outer cylindrical tubular body (2)  
equipped with a plurality of radial holes (3), arranged  
10 according to substantially longitudinal rows, capable of  
rotating with respect to a second inner fixed body (4) co-  
axial to it and connected to a suction system. The second  
body (4) has tubular cylindrical geometry like the first  
body (2) and has a plurality of apertures (5) and two  
15 radial boards (7) arranged at opposite sides with respect  
to the apertures (5). The inner surface of the first  
cylindrical tubular body (2), together with the radial  
boards (7) and to the external surface of the second  
tubular body (4), define a suction chamber (6) that brings  
20 selectively in communication selected rows of holes (3) of  
the first cylindrical tubular body (2) with the apertures  
(5) of the second tubular body (4) and then with the  
suction system of the machine during the relative rotation  
of the two bodies. Therefore, a web or sheet of paper (20)  
25 adheres to the external surface of the first body (2) only  
in the portion  $P_1P_2$  of surface set between the rows of  
holes (3') that communicates with the suction chamber  
(figure 4).

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